



Missouri Department of Health and Senior Services

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INFORMATIONAL RELEASE E1-10

TO: Administrators, Local Public Health Agencies (LPHA)
LPHA Environmental Staff

FROM: Scott A. Clardy, Administrator
Section for Disease Control and Environmental Epidemiology

SUBJECT: **Wastewater disposal systems serving regulated facilities**

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We have recently received a number of questions and requests for clarification about the inspection and enforcement of wastewater disposal systems serving regulated facilities. The purpose of this informational release is to provide guidance and to clarify the position of the Department of Health and Senior Services (DHSS) on this subject.

Wastewater treatment systems that serve regulated establishments shall provide for the sanitary treatment and disposal of wastewater and be in compliance with state laws, regulations, and local ordinances. The following guidance and accompanying decision tree (see Figure 1) has been developed to provide clarification on criteria for system evaluation and ensuing action. In some cases, there are too many variables involved in individual situations for a single policy to apply to all situations. If there is any doubt what the proper action is, contact DHSS for technical assistance.

1. Evaluation of Systems

Environmental Public Health Specialists (EPHS) must evaluate the wastewater system as a part of each annual or routine inspection. Municipal or other public treatment systems only need to be evaluated if there are pump tanks or other components under the control of the management of the establishment. Small community or multi-establishment systems should be evaluated when the owner of the establishment has a reasonable degree of control over the system and the ability to make corrections.

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Evaluation Criteria

A. Possible Problems with Lagoons

Things to evaluate:

- 1) not holding water;
- 2) septic color/odor;
- 3) excessive weeds/woody vegetation;
- 4) excessive shading;
- 5) fencing does not prevent entrance of children and small domesticated animals;
- 6) discharging untreated effluent;
- 7) floating grease balls or other visible solids;
- 8) erosion of the berm; and
- 9) seepage through the berm.

If the berm of the lagoon is washed out and waste is flowing down the hill, or there are other clear and obvious issues that constitute a health hazard, mark a wastewater violation on the inspection report and contact the Department of Natural Resources (DNR) regional office. If there are less serious issues like shading over the lagoon or erosion of the berm that is not currently leaking, notify the appropriate DNR regional office. Lagoons serving small in-home businesses like licensed family home childcare facilities and small food processors are not regulated by DNR when the business is less than 50% of flow. Therefore, do not contact DNR in these cases.

B. Subsurface disposal systems

If there is surfacing or discharging wastewater, mark a violation on the inspection report. If there is clear evidence of prior surfacing or signs of intermittent failure, then judgment and discretion must be used to evaluate the likelihood of future failure and health hazard. In many cases, subsurface disposal systems will be under the authority of the state/local health department. However, DNR has regulatory oversight for systems with flows over 3,000 gallons per day. DNR must be contacted when system failure is observed with these larger systems.

C. Discharging wastewater treatment systems

Possible problems:

1. general appearance of the plant:
 - a. broken pipes other signs of mechanical failure;
 - b. for sand filters, presence of standing water or excessive weeds;
2. unusual appearance or odor of the discharge;
3. aeration motors/pumps malfunctioning; and
4. alarms sounding/warning lights.

If any of these are observed, contact the regional DNR office. In addition, if there is evidence of untreated or grossly undertreated wastewater discharging, mark a violation on the inspection report.

2. Risk Categorization of Violations

All violations should be categorized as an imminent, serious, or a minimal health hazard. Imminent hazards are where there is a substantial ongoing risk of human illness because of the situation. This would include direct contamination of a drinking water supply; wastewater backed up on the floor of a regulated facility or in a play area of a childcare facility; or sewage backed up where employees or guests must walk through it. Serious violations will include wastewater entering a lake, stream, or public access areas, including adjacent to outdoor play areas. Minimal risk violations include low volume or intermittent surfacing of wastewater in areas not mentioned above.

3. Interim Controls, Corrective Actions, and Timeframes

Interim controls are temporary measures that do not require major modifications or repairs, but reduce or eliminate health hazards while permanent corrections are being planned and implemented. Examples of interim controls would be pumping and hauling of wastewater or ceasing operations. This may include installing holding tanks that will be pumped routinely. See Section 5.2 of the Environmental Health Operational Guidelines (EHOG) for more details on holding tanks.

Corrective actions are repairs to existing systems or replacement of failing systems. Direction for corrective actions of DNR regulated systems will come from that agency. Most corrective actions for regulated facilities with systems under the jurisdiction of the health departments will require a permit. Exceptions include the small in-home businesses on more than three acres in non-ordinance areas and minor repairs that may be considered maintenance, like replacing an effluent pump. However, a construction permit is always required for any system in which a Notice of Violation (NOV) has been issued.

A. Timeframes

For any facility, if the wastewater issue constitutes an imminent health hazard, interim controls or corrective actions must be put in place immediately. Otherwise, proceed directly to enforcement actions: work order, immediate closure, and/or referring the establishment to the prosecuting attorney. Jurisdictions enforcing state regulations (counties without food ordinances, all childcare, and lodging) must contact their regional EPHS V or environmental childcare EPHS IV for assistance in proceeding with enforcement actions.

Once interim measures are put in place, timeframes to establish permanent corrective actions must be established.

B. For systems regulated by the health department:

After the initial inspection where a wastewater disposal violation is noted, give a reasonable timeframe for corrections. Common timeframes are sixty days to do a soil evaluation and submit a permit application and sixty days to complete construction after a permit is issued. If extenuating circumstances exist, time extensions may be considered. If these timeframes are not met, an NOV and work order will be issued.

C. For systems regulated by the Department of Natural Resources:

If DNR issues an NOV on a wastewater system serving a regulated facility, the EPHS will evaluate the NOV and work with DNR and DHSS to evaluate any health hazards associated with the system. In most instances, it will be necessary to perform an onsite evaluation of the system.

- i. No action will be taken if there is no perceivable threat to public health (e.g. no dechlorination or no warning signs).
- ii. Action will be taken if the NOV is related to a public health hazard (e.g. system failure or inadequate treatment). Document the violation in accordance with the regulations relevant to the establishment. Advise the operator that they are to comply with DNR-established timeframes, and conduct follow-up inspections as necessary to determine compliance with DNR timeframes. If the timeframes are not met, a work order or other equivalent enforcement action will be taken.

Note that correction timeframes should not include time necessary for DNR to review the application and issue the permit. As such, separate corrective timeframes are usually established for permit application submission and for final construction after the construction permit is issued. If a DNR system is in violation but DNR does not issue a NOV in a reasonable timeframe contact your EPHS V or environmental childcare EPHS IV for assistance.

4. Establishing Jurisdiction

DHSS and LPHAs regulate systems with flow rates of 3,000 gallons per day or less. DNR regulates facilities with over 3,000 gallons per day, discharging systems and lagoons other than single family residences. This daily flow rate is determined by the values in 19 CSR 20-3.060 table 2A (the “green book”).

cc: Regional EPHS Vs

Figure 1: DHSS/LPHA decision tree for wastewater treatment systems serving regulated establishments.

